

Remarks

Claims 1-18 are pending in the present application. In an Office Action mailed October 3, 2007, the Examiner objected to the abstract as not being descriptive. While Applicants' disagree with the Examiner's objection, the abstract is amended to facilitate expedited prosecution of the present application. The objection is therefore believed to be moot in light of the amendment. The Examiner rejected claims 1-18 under 35 U.S.C. §102(e) as being anticipated by U.S. publication 2003/0026028 to Ichihara *et al.* (henceforth Ichihara). Applicants respectfully disagree with the Examiner's rejection and seek reconsideration in light of the following remarks.

Independent claim 1 provides a system for use in a tape drive. The system includes a tape head which has access to a tape. The tape head generates read signals based on a spatial relationship between the tape head and the tape. The system includes a plurality of pulse shaping filters. Each pulse shaping filter receives the read signals and produces pulse-shaped signals. Each pulse shaping filter has at least one filter parameter based on a possible tape head-to-tape spatial relationship. The at least one filter parameter is unique to that filter. The system also has a signal decoder which receives the plurality of pulse-shaped signals and produces decoded output signals. The signal decoder has a plurality of viterbi processors. Each viterbi processor accepts pulse-shaped signals from one of the plurality of pulse shaping filters. The signal decoder also has at least one low density parity check decoder which produces the decoded output signals based on the output from one of the plurality of viterbi processors.

The Examiner rejected claim 1 as anticipated by Ichihara. The Examiner identified Ichihara's equalizer 58 as Applicants' plurality of pulse shaping filters, relying primarily on para. 5, Figure 4a:block 80, and Figure 10a to show the equivalent of the plurality of pulse shaping filters. Ichihara's Figure 4a, Figure 10a, and paragraph 5 are provided below:

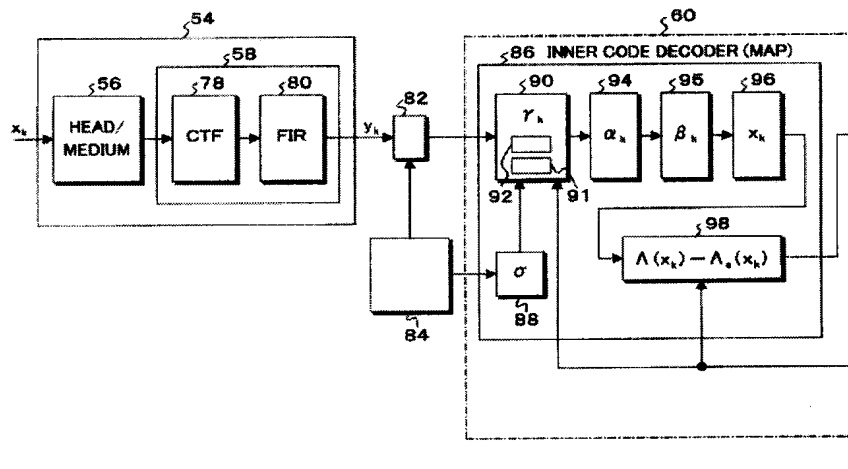
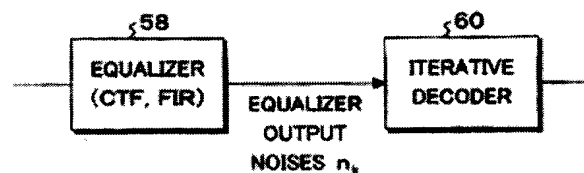


FIG. 10A



In recent years, the error correction of the recording and reproducing apparatus is realized mainly by a combination of two methods called PRML (Partial Response Maximum Likelihood) and ECC (Error Correction Code). The PRML is a method whereby a recording channel is regarded as a partial response channel (hereinafter, referred to as a PR channel) with an intersymbol interference and a Maximum Likelihood Decoding generally using a viterbi detector is executed.

(Ichihara, ¶ 5.)

As seen above, Ichihara neither teaches nor fairly suggests Applicants’ “plurality of pulse shaping filters”. The *single* equalizer 58 identified by the Examiner in Ichihara does not disclose Applicants’ *plurality* of pulse shaping filters. Moreover, the Examiner failed to find any teaching whatsoever in Ichihara for each of Applicants’ pulse shaping filters having “at least one unique filter parameter based on a possible tape head-to-

tape spatial relationship". Thus, the Examiner has failed to establish a *prima facie* case of anticipation.

For at least the reasons mentioned above, claim 1 is not disclosed by Ichihara. Claim 1 is therefore patentable under 35 U.S.C. §102(e) over Ichihara. Claims 2-10, which depend from claim 1, are also patentable.

Independent claim 11 provides a method of retrieving data from tape. Tape is read with a tape head to generate a read signal. The tape head has a spatial relationship with the tape as the tape passes the tape head. The spatial relationship is described by at least one variable spatial parameter. The read signal is filtered with a set of parallel filters. Each filter receives the read signal and produces a filtered signal. Each filter is based on at least one unique value for the at least one variable spatial parameter. Each filtered signal is then processed with a viterbi algorithm. A decoded output signal is generated based on selecting and parity checking one of the viterbi processed filtered signals.

The Examiner rejected Applicants' claim 11 as anticipated by Ichihara, relying on Ichihara's figures 4a and 10a. Claim 11 includes the limitation "The read signal is filtered with a set of parallel filters. " As described above, Ichihara's *single* equalizer 58 does not disclose Applicants' *plurality* of parallel filters. As with Applicants' claim 1, the Examiner failed to find any teaching whatsoever in Ichihara for each of Applicants' filters being based on "at least one unique value for the at least one variable spatial parameter". Thus, the Examiner has failed to establish a *prima facie* case of anticipation.


For at least the reasons mentioned above, claim 11 is not disclosed by Ichihara. Claim 11 is therefore patentable under 35 U.S.C. §102(e) over Ichihara. Claims 12-18, which depend from claim 11, are also patentable.

Claims 1-18 are pending in this application. Applicants believe these claims meet all substantive requirements for patentability and respectfully request that this case be passed to issuance. No fee is believed due by filing this paper. However, any fee due may be withdrawn from our Deposit Account No. 02-3978.

The Examiner is invited to contact the undersigned to discuss any aspect of this case

Respectfully submitted,

MARK HENNECKEN et al.

By 
Mark D. Chuey
Reg. No. 42,415
Attorney for Applicant

Date: December 19, 2007

BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351

Attachment: Replacement Abstract